

PTO/SB/08B(10-01)

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet 2 Of 7

Complete if Known

Application Number	10/075,120
Filing Date	February 13, 2002
First Named Inventor	Clive Pai
Group Art Unit	3736
Examiner Name	MARMOR, II
Attorney Docket Number	6370

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS

Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
Can	1	ROY, ET AL., Fatigue, recovery, and low back pain in varsity rowers, Medicine and Science in Sports and Exercise, Vol. 22, No. 4, 1989, pp. 463-469.	✓
Can	2	ROY, ET AL., Lumbar Muscle Fatigue and Chronic Lower Back Pain, SPINE, Vol. 14, Number 9, 1989, pp. 992-1000.	✓
Can	3	O'SULLIVAN, ET AL., Evaluation of Specific Stabilizing Exercise in the Treatment of Chronic Low Back Pain With Radiologic Diagnosis of Spondylolysis or Spondylolisthesis, SPINE, Volume 22, Number 24, 1997, pp. 2959-2967.	✓
Can	4	FRITZ, ET AL., Segmental Instability of the Lumbar Spine, Physical Therapy, Volume 78, Number 8, August 1998, pp. 889-894.	✓
Can	5	TAIMELA, ET AL., The Effect of Lumbar Fatigue on the Ability to Sense a Change in Lumbar Position, SPINE, Volume 24, Number 13, 1999, pp. 1322-1327.	✓
Can	6	GILL, ET AL., The Measurement of Lumbar Proprioception in Individuals With and Without Low Back Pain, SPINE, Volume 23, Number 3, 1998, pp. 371-377.	✓
Can	7	KOUMANTAKIS, ET AL., Toracolumbar Proprioception in Individuals With and Without Low Back Pain: Intratester Reliability, Clinical Applicability, and Validity, Journal of Orthopaedic & Sports Physical Therapy, Volume 32, Number 7, July 2002, pp. 327-335.	✓
Can	8	BRUMAGNE, ET AL., Effect of Paraspinal Muscle Vibration on Position Sense of the Lumbosacral Spine, SPINE, Volume 24, Number 13, pp. 1328-1331, 1999.	✓
Can	9	BRUMAGNE, ET AL., Lumbosacral Position Sense During Pelvic Tilting in Men and Women Without Low Back Pain: Test Development and Reliability Assessment, Journal of Orthopaedic & Sports Physical Therapy, Volume 29, Number 6, 1999, pp. 345-351.	✓
Can	10	LAM, ET AL., Lumbar Spine Kinesthesia in Patients with Low Back Pain, Journal of Orthopaedic & Sports Physical Therapy, Volume 29, Number 5, 1999, pp. 294-299.	✓
Can	11	PARKHURST, ET AL., Injury and Proprioception in the Lower Back, Journal of Orthopaedic & Sports Physical Therapy, Volume 19, Number 5, 1994, pp. 282-295.	✓
Can	12	SWINKELS, ET AL., Regional Assessment of Joint Position Sense in the Spine, SPINE, Volume 23, Number 5, 1998, pp. 590-597.	✓

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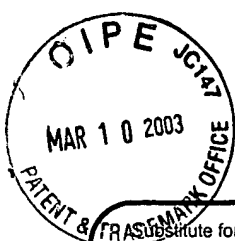
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Can	13	SWINKELS, ET AL., Spinal Position Sense Is Independent of the Magnitude of Movement, SPINE, Volume 25, Number 1, 2000, pp. 98-105.	/
Can	14	MAFFEY-WARD, ET AL., Toward a Clinical Test of Lumbar Spine Kinesthesia, Journal of Orthopaedic & Sports Physical Therapy, Volume 24, Number 6, December 1996, pp. 354-358.	/
Can	15	NEWCOMER, ET AL., Repositioning Error in Low Back Pain, SPINE, Volume 25, Number 2, 2000, pp. 245-250.	/
Can	16	ROY, ET AL., Fatigue, recovery, and low back pain in varsity rowers, Medicine and Science in Sports and Exercise, Volume 22, Number 4, 1990, pp. 463-469.	
Can	17	FRITZ, ET AL., Segmental Instability of the Lumbar Spine, Physical Therapy, Volume 78, Number 8, August 1998, pp. 889-894.	
Can	18	AMONOO-KUOFI, The number and distribution of muscle spindles in human intrinsic postvertebral muscles. J. Anat. 1982; 135:585-99.	
	19	ASHTON-MILLER, ET AL., Trunk positioning accuracy in children 7-18 years old. J Orthop Res. 1992; 10:217-25.	
	20	BARRACK, ET AL., Proprioception in the anterior cruciate deficient knee. The American Journal of Sports Medicine. 1989; 17(1):1-6.	
	21	BARRETT, ET AL., Joint proprioception in normal, osteoarthritic and replaced knees. J Bone Joint Surg [BR]. 1991; 73:53-6.	
	22	BARRETT. Proprioception and function after anterior cruciate reconstruction. J Bone Joint Surg. Br. 1991; 73:833-837.	
↓	23	CORRIGAN, ET AL., Proprioception in the cruciate deficient knee. J Bone Joint Surgery. 1992; 74B:247-250.	
Can	24	ESOLA, ET AL., Analysis of lumbar spine and hip motion during forward bending in subjects with and without a history of low back pain. Spine. 1996; 21(1):71-78.	

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Charles Marmor II

Date

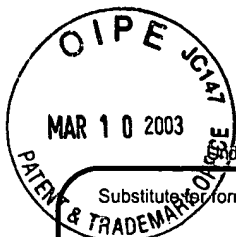
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Sheet

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First Named Inventor	Clive Pai
Group Art Unit	3736
Examiner Name	Marmor, II
Attorney Docket Number	6370

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TECHNOLOGY CENTER B2708**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

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Can	25	FAIRBANKS, ET AL. The oswestry low back pain disability questionnaire. Physiotherapy. 1980; 6:271-273.	
	26	FARFAN, Muscular mechanism of the lumbar spine and the position of power and efficiency. Orthopedic Clinics of North America. 1975; 6(1):135-144.	
	27	FRITZ, ET AL. Improving neuromuscular control following trunk and lumbar spine injury. The professional journal for athletic trainers and therapists. 1998; 19-28.	
	28	FREEMAN, ET AL. The etiology and prevention of functional instability of the foot. J Bone Joint Surg. 1965; 47B:678-685.	
	29	GANDEVIA, ET AL. Does the nervous system depend on kinesthetic information to control natural limb movements? Behavioral and Brain Sciences. 1992; 15(4):614-632.	
	30	GANDEVIA, ET AL. Proprioceptive sensation at the terminal joint of the middle finger. J Physiol. 1983; 335:507-517.	
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	32	GLENCROSS, ET AL. Position sense following joint injury. J Sports Med. 1981; 21:23-27.	
	33	GOODWIN, ET AL. The persistence of appreciable kinesthesia after paralyzing joint afferents but preserving muscle afferents. Brain Research. 1972; 37:326-329.	
	34	GRIGG. Peripheral neural mechanisms in proprioception. J Sport Rehabil. 1994; 3:2-17.	
✓	35	HAGINS, ET AL. Effects of practice on the ability to perform lumbar stabilization exercises. JOSPT. 1999; 29(9):546-555.	
Can	36	HIDES, ET AL. Multifidus muscle recovery is not automatic after resolution of acute, first-episode low back pain. Spine. 1996; 21(23):2763-2769.	

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Signature

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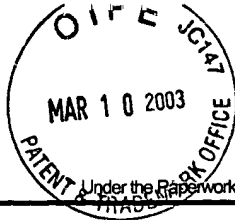
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Sheet 5 Of 7

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First Named Inventor	Clive Pai
Group Art Unit	3736
Examiner Name	Marmor, II
Attorney Docket Number	6370

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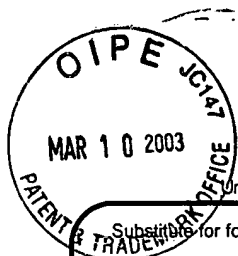
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Can	37	HIDES, ET AL. Evidence of lumbar multifidus muscle wasting ipsilateral to symptoms in patients with acute/subacute low back pain. Spine. 1994; 19(2):165-172.	
	38	JAKOBS, ET AL. Trunk position sense in the frontal plane. Exp Neurol. 1985; 90:129-38.	
	39	JOHANNSEN, ET AL. Exercises for chronic low back pain: a clinical trial. JOSPT. 1995; 22(2):52-59.	
	40	KAPLAN, ET AL. Age-related changes in proprioception and sensation of joint position. Acta Orthop Scand. 1985; 56:72-74.	
	41	LOUDON, ET AL. Ability to reproduce head position after whiplash injury. Spine. 1997; 22(8):865-868.	
	42	MARKS, ET AL. Proprioceptive sensibility in women with normal and osteoarthritic knee joints. Clinical Rheumatology. 1993; 12(2):170-175.	
	43	MARTIN, ET AL. Anatomy of the somatic sensory system. In: Kandel, et al., eds. Principles of Neural Science. Norwalk: Appleton & Lange; 1991:353-366.	
	44	MATTHEWS. Proprioceptors and their contribution to somatosensory mapping: complex messages require complex processing. Can J Physiol Pharmacol. 1988; 66:430-438.	
	45	MCCLURE, ET AL. Kinematic analysis of lumbar and hip motion while rising from a forward, flexed position in patients with and without a history of low back pain. Spine. 1997; 22(5):552-558.	
	46	MCLAIN, ET AL. Mechanoreceptor endings of the cervical, thoracic, and lumbar spine. Iowa Orthopedic Journal. 1995; 15:147-155.	
↓	47	MCLAIN. Mechanoreceptor endings in human cervical facet joints. Spine. 1994; 19:495-501.	
Can	48	MCNAIR, ET AL. Trunk proprioception enhancement through lumbar bracing. Archives of Phys Medicine and Rehabilitation. 1999; 80:96-99.	

Examiner Signature	Charles Marmor, II	Date Considered	3/15/04
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First Named Inventor	Clive Pai
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TECHNOLOGY CENTER R3700**OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS**

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Ca	49	NELSON, ET AL. Relative lumbar and pelvic motion during loaded spinal flexion/extension. Spine. 1995; 20(2):199-204.	
	50	PAQUET, ET AL. Hip-spine movement interaction and muscle activation patterns during sagittal trunk movements in low back pain patients. Spine. 1994; 19(5):596-603.	
	51	REVEL, ET AL. Cervicocephalic kinesthetic sensibility in patients with cervical pain. Arch Phys Med Rehabil. 1991; 72:288-291.	
	52	REVEL, ET AL. Changes in cervicocephalic kinesthesia after a proprioceptive rehabilitation program in patients with neck pain: a randomized controlled study. Arch Phys Med Rehabil. 1994; 75:895-899.	
	53	ROBERTS, ET AL. Proprioception in people with anterior cruciate ligament-deficient knees: comparison of symptomatic and asymptomatic patients. JOSPT. 1999; 29(10):587-594.	
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	55	SCHACHE, ET AL. The coordinated movement of the lumbo-pelvic-hip complex during running: a literature review. Gait and posture. 1999; 10:30-47.	
	56	SCHMIDT. Motor Control and Learning: A Behavioral Emphasis. 2nd ed. Champaign, Illinois: Human Kinetics Publishers Inc.; 1988.	
	57	SHARMA, ET AL. Impaired proprioception and osteoarthritis. Current Opinion in Rheumatology. 1997; 9:253-258.	
	58	SHROUT, ET AL. Intraclass correlations: uses in assessing rater reliability. Psychological Bulletin. 1986; 420-428.	
↓	59	SKINNER, ET AL. Joint position sense in total knee arthroplasty. J. Orthop Research. 1984; 1:276-283.	
Ca	60	SKINNER, ET AL. Age-related decline in proprioception. Clin Orthop & Rel Research. 1984; 184:208-210.	

Examiner
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Can	61	SKINNER, ET AL. Joint position sense in the normal and pathologic knee joint. Journal of Electromyography and Kinesiology. 1991; 1(3):180-190.	
	62	SKINNER, ET AL. Effect of fatigue on joint position sense of the knee. J Orthop Research. 1986; 4:112-118.	
	63	TAYLOR, ET AL. Proprioception in the neck. Exp Brain Res. 1988; 70:351-60.	
	64	TAYLOR, ET AL. Proprioceptive sensation in rotation of the trunk. Exp Brain Res. 1990; 81:413-416.	
	65	TROPP, ET AL. Stabilometry in functional instability of the ankle and its value in predicting injury. Medicine and science in sports and exercise. 1984; 16(1):64-66.	
	66	TULLY. Lumbofemoral rhythm during hip flexion in young adults and children. Spine. 2002; 27(20):E432-E440.	
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	68	YAHIA, ET AL. Neurohistology of lumbar spine ligaments. Acta Orthop Scand. 1988; 59:508-512.	
	69	YAMASHITA, ET AL. Mechanosensitive afferent units in the lumbar facet joint. The Journal of Bone and Joint Surgery. 1990; 72A(6):865-870.	
Can	70	YAMASHITA, ET AL. Mechanosensitive afferent units in the lumbar intervertebral disc and adjacent muscle. Spine. 1993; 18(15):2252-2256.	

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